CLAIMS

1. A method of handling user's attributes sharing between
    a plurality of Service Providers (20, 30), a Service
    Provider being regarded as an Attribute Provider (20)
5   hosting at least one user's attribute for a user (40)
    and offering such attribute for sharing with other
    Service Providers regarded as Attribute Requestors
    (30), an attribute offering being published in a
    Discovery Service Framework (10) suitable for holding
10 attribute offerings from at least one Attribute
    Provider (20) and for providing any of such attribute
    offerings to at least one Attribute Requestor (30), the
    method comprising the steps of:

    (a) the Attribute Provider registering (S-101) an
15   attribute offering in the Discovery Service
        Framework;

    (b) the Attribute Provider providing (S-105) the
        attribute upon request (S-104) from an Attribute
        Requestor;

20 the method **characterized in that** the above step a) is
    preceded in this method by previous steps of:

    (c) the Attribute Provider (20) registering (S-108) an
        offering registration trigger in the Discovery
        Service Framework (10) intended to request, if
25   needed, the registration of the attribute offering;
        and

    (d) the Attribute Provider (20) receiving (S-109) from
        the Discovery Service Framework (10) a request for
        registration of the attribute offering.

2. The method of claim 1 wherein the offering registration trigger is the same for all those users for which the Attribute Provider hosts users' attributes (S-112).

3. The method of claim 1 wherein the offering registration trigger is different for each user having a user's attribute (S-112) hosted in the Attribute Provider.

4. The method of claim 1 wherein the step of registering (S-108) an offering registration trigger in the Discovery Service Framework also includes a step of registering policies intended to govern the lifetime of the offering registration trigger.

5. The method of claim 1 wherein the step of registering (S-101) an attribute offering in the Discovery Service Framework also includes a step of registering policies intended to govern the lifetime of the attribute offering.

6. The method of claim 1 further comprising a step of obtaining (S-106, S-107) a user's consent to share a user's attribute.

7. The method of claim 1 wherein the offering registration trigger is withdrawn (S-110) once the user signs off.

8. The method of claim 1 wherein just the attribute offering, and not the offering registration trigger, is withdrawn (S-111) once the user signs off.

9. A method of publishing through a Discovery Service Framework (10) an attribute offering for sharing a user's attribute between a plurality of Service Providers (20, 30), a Service Provider being regarded as an Attribute Provider (20) hosting the user's attribute for which the attribute offering may be published, the Discovery Service Framework (10)

suitable for holding attribute offerings from at least
one Attribute Provider (20), the method comprising the
steps of:

(a) registering (S-101) in the Discovery Service
    Framework (10) an attribute offering upon request
    from an Attribute Provider (20);

(b) the Discovery Service Framework providing (S-103)
    the attribute offering upon request (S-102) from a
    Service Provider acting as an Attribute Requestor
    (30) for the attribute offering;

the method **characterized in that** the above step a) is
preceded in this method by previous steps of:

(c) registering (S-108) an offering registration
    trigger in the Discovery Service Framework (10)
    upon request from the Attribute Provider (20);

(d) the Discovery Service Framework processing the
    offering registration trigger upon request for an
    attribute offering received from an Attribute
    Requestor; and

(e) requesting (S-109) the registration of the
    attribute offering to the Attribute Provider (20)
    as a result of processing the offering registration
    trigger.

10. The method of claim 9 wherein the step of registering
    (S-108) an offering registration trigger in the
    Discovery Service Framework also includes a step of
    registering policies intended to govern the lifetime of
    the offering registration trigger.

11. The method of claim 9 wherein the step of registering
    (S-101) an attribute offering in the Discovery Service

Framework also includes a step of registering policies intended to govern the lifetime of the attribute offering.

12. The method of claim 9 wherein the offering registration trigger is withdrawn upon processing corresponding policies governing its lifetime.

13. The method of claim 9 wherein the offering registration trigger is withdrawn upon request (S-110) from the Attribute Provider (20) where the user signs off.

14. The method of claim 9 wherein just the attribute offering, and not the offering registration trigger, is withdrawn upon processing corresponding policies governing its lifetime.

15. The method of claim 9 wherein just the attribute offering, and not the offering registration trigger, is withdrawn upon request (S-111) from the Attribute Provider (20) where the user signs off.

16. A Discovery Service Framework (10) suitable for holding an attribute offering registered from an Attribute Provider (20) and for providing the attribute offering to an Attribute Requestor (30), the Attribute Provider and the Attribute Requestor being Service Providers (20, 30) enabled for sharing a user's attribute, the Attribute Provider hosting the user's attribute to be shared, the Discovery Service Framework (10) including:

    (a) a first input unit (FIU-1) for processing an attribute offering received from an Attribute Provider (20);

    (b) a storage (F-db) for storing contents obtainable from the attribute offering;

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(c) a second input unit (FIU-2) for processing a request received from an Attribute Requestor (30) for the attribute offering; and

(d) a first output unit (FOU-1) for providing the attribute offering to the Attribute Requestor (30);

and **characterized in that** further comprises:

(e) a third input unit (FIU-3) for processing an offering registration trigger received from the Attribute Provider (20);

(f) a trigger handler (TH) for storing contents obtainable from the offering registration trigger and for determining trigger conditions to request a registration of the attribute offering; and

(g) a second output unit (FOU-2) for requesting the registration of the attribute offering to the Attribute Provider (20).

17. The Discovery Service Framework of claim 16 wherein the trigger handler (TH) determines the trigger conditions upon reception in the second input unit (FIU-2) of the request (S-102) for the attribute offering from the Attribute Requestor (30).

18. The Discovery Service Framework of claim 16 wherein the trigger handler (TH) is usable for processing policies received in the third input unit (FIU-3) and intended to govern the lifetime of the offering registration trigger.

19. The Discovery Service Framework of claim 18 wherein the trigger handler (TH) is usable to withdraw an offering registration trigger upon processing corresponding policies governing its lifetime.

20. The Discovery Service Framework of claim 16 wherein the trigger handler (TH) is usable to withdraw an offering registration trigger upon request (S-110) received in a fourth input unit (FIU-4) from the Attribute Provider (20) where the user signs off.

21. The Discovery Service Framework of claim 16 wherein the trigger handler (TH) is usable for processing policies received in the first input unit (FIU-1) and intended to govern the lifetime of the attribute offering.

22. The Discovery Service Framework of claim 21 wherein the trigger handler (TH) is usable to withdraw an attribute offering upon processing corresponding policies governing its lifetime.

23. The Discovery Service Framework of claim 16 wherein the trigger handler (TH) is usable to withdraw an attribute offering upon request (S-111) received in a fifth input unit (FIU-5) from the Attribute Provider (20) where the user signs off.

24. An Attribute Provider (20) hosting a user's attribute for a user (40) and offering such attribute for sharing with other Service Providers regarded as Attribute Requestors (30), an attribute offering for the user's attribute being published in a Discovery Service Framework (10) suitable for holding attribute offerings from Attribute Providers (20) and for providing any of such attribute offerings to Attribute Requestors (30), the Attribute Provider (20) comprising:

   (a) a first output unit (POU-1) for accessing the Discovery Service Framework (10) to register an attribute offering;

(b) a first input unit (PIU-1) for processing a request received (S-104) from an Attribute Requestor (30) for the attribute offering; and

(c) a second output unit (POU-2) for providing the attribute offering to the Attribute Requestor (30);

and **characterized in that** further comprises:

(d) a third output unit (POU-3) for accessing (S-108) the Discovery Service Framework (10) to register an offering registration trigger; and

(e) a second input unit (PIU-2) for processing a request received (S-109) from the Discovery Service Framework (10) for registration of an attribute offering.

25. The Attribute Provider of claim 24 wherein the third output unit (POU-3) is used for accessing the Discovery Service Framework (10) to register policies intended to govern the lifetime of the offering registration trigger.

26. The Attribute Provider of claim 24 wherein the first output unit (POU-1) is used for accessing the Discovery Service Framework (10) to register policies intended to govern the lifetime of the attribute offering.

27. The Attribute Provider of claim 24 further comprising:

(f) a fourth output unit (POU-4) for requesting (S-106) a user's consent to share a user's attribute; and

(g) a third input unit (PIU-3) for obtaining (S-107) the user's consent to share a user's attribute.

28. The Attribute Provider of claim 24 further comprising a fifth output unit (POU-5) for accessing the Discovery

Service Framework (10) to withdraw (S-110) an offering registration trigger upon the user (40) signing off.

29. The Attribute Provider of claim 24 further comprising a sixth output unit (POU-6) for accessing the Discovery Service Framework (10) to withdraw (S-111) an attribute offering upon the user (40) signing off.

30. The Attribute Provider of claim 24 wherein the third output unit (POU-3) is used to register in the Discovery Service Framework (10) a same offering registration trigger for all those users for which the Attribute Provider hosts users' attributes.

31. The Attribute Provider of claim 24 wherein the third output unit (POU-3) is used to register in the Discovery Service Framework (10) a different offering registration trigger for each user having a user's attribute hosted in the Attribute Provider.

32. The Attribute Provider of claim 24 wherein the third and first output units are used to register the offering registration trigger along with an actual attribute offering.